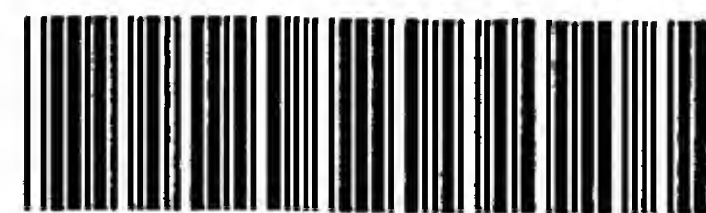# RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/575,193_
Source: _1FWP_
Date Processed by STIC: _4/24/06_

ENTERED

RAW SEQUENCE LISTING   DATE: 04/24/2006
PATENT APPLICATION: US/10/575,193   TIME: 16:14:00

Input Set : **A:\14875-160US1.txt**
Output Set: **N:\CRF4\04242006\J575193.raw**

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   3 <110> APPLICANT: Hattori, Kunihiro
   4         Kojima, Tetsuo
   5         Miyazaki, Taro
   6         Soeda, Tetsuhiro
   8 <120> TITLE OF INVENTION: BISPECIFIC ANTIBODY SUBSTITUTING FOR FUNCTIONAL PROTEINS
  10 <130> FILE REFERENCE: 14875-160US1
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/575,193
C--> 12 <141> CURRENT FILING DATE: 2006-04-07
  12 <150> PRIOR APPLICATION NUMBER: PCT/JP2004/014911
  13 <151> PRIOR FILING DATE: 2004-10-08
  15 <150> PRIOR APPLICATION NUMBER: PCT/JP03/13062
  16 <151> PRIOR FILING DATE: 2003-10-10
  18 <150> PRIOR APPLICATION NUMBER: PCT/JP03/13123
  19 <151> PRIOR FILING DATE: 2003-10-14
  21 <160> NUMBER OF SEQ ID NOS: 268
  23 <170> SOFTWARE: PatentIn version 3.1
  25 <210> SEQ ID NO: 1
  26 <211> LENGTH: 22
  27 <212> TYPE: DNA
  28 <213> ORGANISM: Artificial
  30 <220> FEATURE:
  31 <223> OTHER INFORMATION: an artificially synthesized primer sequence
  33 <400> SEQUENCE: 1
  34 cagctatgaa atacctattg cc                                               22
  37 <210> SEQ ID NO: 2
  38 <211> LENGTH: 23
  39 <212> TYPE: DNA
  40 <213> ORGANISM: Artificial
  42 <220> FEATURE:
  43 <223> OTHER INFORMATION: an artificially synthesized primer sequence
  45 <400> SEQUENCE: 2
  46 cttttcataa tcaaaatcac cgg                                              23
  49 <210> SEQ ID NO: 3
  50 <211> LENGTH: 19
  51 <212> TYPE: DNA
  52 <213> ORGANISM: Artificial
  54 <220> FEATURE:
  55 <223> OTHER INFORMATION: an artificially synthesized primer sequence
  57 <400> SEQUENCE: 3
  58 attgcctacg gcagccgct                                                   19
  61 <210> SEQ ID NO: 4
  62 <211> LENGTH: 20
  63 <212> TYPE: DNA
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/575,193

DATE: 04/24/2006
TIME: 16:14:00

Input Set : **A:\14875-160US1.txt**
Output Set: **N:\CRF4\04242006\J575193.raw**

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 64 <213> ORGANISM: Artificial
 66 <220> FEATURE:
 67 <223> OTHER INFORMATION: an artificially synthesized primer sequence
 69 <400> SEQUENCE: 4
 70 aaatcaccgg aaccagagcc                                                    20
 73 <210> SEQ ID NO: 5
 74 <211> LENGTH: 24
 75 <212> TYPE: DNA
 76 <213> ORGANISM: Artificial
 78 <220> FEATURE:
 79 <223> OTHER INFORMATION: an artificially synthesized primer sequence
 81 <400> SEQUENCE: 5
 82 ttactcgcgg cccagccggc catg                                              24
 85 <210> SEQ ID NO: 6
 86 <211> LENGTH: 28
 87 <212> TYPE: DNA
 88 <213> ORGANISM: Artificial
 90 <220> FEATURE:
 91 <223> OTHER INFORMATION: an artificially synthesized primer sequence
 93 <400> SEQUENCE: 6
 94 ggaattcggc ccccgaggcc cactcacg                                          28
 97 <210> SEQ ID NO: 7
 98 <211> LENGTH: 1215
 99 <212> TYPE: DNA
100 <213> ORGANISM: Homo sapiens
102 <400> SEQUENCE: 7
103 ggcctcgggg gccagctttc tggggcaggc caggcctgac cttggctttg gggcagggag        60
105 ggggctaagg tgaggcaggt ggcgccagcc aggtgcacac ccaatgccca tgagcccaga       120
107 cactggacgc tgaacctcgc ggacagttaa gaacccaggg gcctctgcgc cctgggccca       180
109 gctctgtccc acaccgcggt cacatggcac cacctctctt gcagcttcca ccaagggccc       240
111 atccgtcttc cccctggcgc cctgctccag gagcacctcc gagagcacag ccgccctggg       300
113 ctgcctggtc aaggactact tccccgaacc ggtgacggtg tcgtggaact caggcgccct       360
115 gaccagcggc gtgcacacct tcccggctgt cctacagtcc tcaggactct actccctcag       420
117 cagcgtggtg accgtgccct ccagcagctt gggcacgaag acctacacct gcaacgtaga       480
119 tcacaagccc agcaacacca aggtggacaa gagagttgag tccaaatatg gtcccccatg       540
121 cccaccatgc ccagcacctg agttcctggg gggaccatca gtcttcctgt tccccccaaa       600
123 acccaaggac actctcatga tctcccggac ccctgaggtc acgtgcgtgg tggtggacgt       660
125 gagccaggaa gaccccgagg tccagttcaa ctggtacgtg gatggcgtgg aggtgcataa       720
127 tgccaagaca aagccgcggg aggagcagtt caacagcacg taccgtgtgg tcagcgtcct       780
129 caccgtcctg caccaggact ggctgaacgg caaggagtac aagtgcaagg tctccaacaa       840
131 aggcctcccg tcctccatcg agaaaaccat ctccaaagcc aaagggcagc cccgagagcc       900
133 acaggtgtgc accctgcccc catcccagga ggagatgacc aagaaccagg tcagcctgtg       960
135 gtgcctggtc aaaggcttct accccagcga catcgccgtg gagtgggaga gcaatgggca      1020
137 gccggagaac aactacaaga ccacgcctcc cgtgctggac tccgacggct ccttcttcct      1080
139 ctacagcagg ctaaccgtgg acaagagcag gtggcaggag gggaatgtct tctcatgctc      1140
141 cgtgatgcat gaggctctgc acaaccacta cacacagaag agcctctccc tgtctctggg      1200
143 taaatgagcg gccgc                                                      1215
146 <210> SEQ ID NO: 8
147 <211> LENGTH: 684
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RAW SEQUENCE LISTING   DATE: 04/24/2006
PATENT APPLICATION: US/10/575,193   TIME: 16:14:00

Input Set : A:\14875-160US1.txt
Output Set: N:\CRF4\04242006\J575193.raw

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149 <213> ORGANISM: Homo sapiens
151 <400> SEQUENCE: 8
152 ggcctcgggg gccgaattcc taaactctga gggggtcgga tgacgtggcc attctttgcc     60
154 taaagcattg agtttactgc aaggtcagaa aagcatgcaa agccctcaga atggctgcaa    120
156 agagctccaa caaaacaatt tagaacttta ttaaggaata gggggaagct aggaagaaac    180
158 tcaaaacatc aagattttaa atacgcttct tggtctcctt gctataatta tctgggataa    240
160 gcatgctgtt ttctgtctgt ccctaacatg ccctgtgatt atccgcaaac aacacaccca    300
162 agggcagaac tttgttactt aaacaccatc ctgtttgctt ctttcctcag gaactgtggc    360
164 tgcaccatct gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc    420
166 tgttgtgtgc ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga    480
168 taacgccctc caatcgggta actcccagga gagtgtcaca gagcaggaca gcaaggacag    540
170 cacctacagc ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaagt    600
172 ctacgcctgc gaagtcaccc atcagggcct gagctcgccc gtcacaaaga gcttcaacag    660
174 gggagagtgt tagagggcgg ccgc                                           684
177 <210> SEQ ID NO: 9
178 <211> LENGTH: 1215
179 <212> TYPE: DNA
180 <213> ORGANISM: Homo sapiens
182 <400> SEQUENCE: 9
183 ggcctcgggg gcctcccagg ctctgggcag gcacaggcta ggtgccccta acccaggccc     60
185 tgcacacaaa ggggcaggtg ctgggctcag acctgccaag agccatatcc gggaggaccc    120
187 tgcccctgac ctaagcccac cccaaaggcc aaactctcca ctccctcagc tcggacacct    180
189 tctctcctcc cagattccag taactcccaa tcttctctct gcagcttcca ccaagggccc    240
191 atccgtcttc cccctggcgc cctgctccag gagcacctcc gagagcacag ccgccctggg    300
193 ctgcctggtc aaggactact ccccgaacc ggtgacggtg tcgtggaact caggcgccct    360
195 gaccagcggc gtgcacacct cccggctgt cctacagtcc tcaggactct actccctcag    420
197 cagcgtggtg accgtgccct ccagcagctt gggcacgaag acctacacct gcaacgtaga    480
199 tcacaagccc agcaacacca aggtggacaa gagagttgag tccaaatatg gtcccccatg    540
201 cccaccatgc ccagcacctg agttcctggg gggaccatca gtcttcctgt tccccccaaa    600
203 acccaaggac actctcatga tctcccggac ccctgaggtc acgtgcgtgg tggtggacgt    660
205 gagccaggaa gacccccgag gtccagttcaa ctggtacgtg gatggcgtgg aggtgcataa    720
207 tgccaagaca aagccgcggg aggagcagtt caacagcacg taccgtgtgg tcagcgtcct    780
209 caccgtcctg caccaggact ggctgaacgg caaggagtac aagtgcaagg tctccaacaa    840
211 aggcctcccg tcctccatcg agaaaaccat ctccaaagcc aaagggcagc cccgagagcc    900
213 acaggtgtac accctgcccc catcccagtg cgagatgacc aagaaccagg tcagcctgtc    960
215 ctgcgcggtc aaaggcttct atcccagcga catcgccgtg gagtgggaga gcaatgggca   1020
217 gccggagaac aactacaaga ccacgcctcc cgtgctggac tccgacggct ccttcttcct   1080
219 cgtgagcagg ctaaccgtgg acaagagcag gtggcaggag gggaatgtct tctcatgctc   1140
221 cgtgatgcat gaggctctgc acaaccacta cacacagaag agcctctccc tgtctctggg   1200
223 taaatgagcg gccgc                                                    1215
226 <210> SEQ ID NO: 10
227 <211> LENGTH: 21
228 <212> TYPE: DNA
229 <213> ORGANISM: Artificial
231 <220> FEATURE:
232 <223> OTHER INFORMATION: an artificially synthesized primer sequence
234 <400> SEQUENCE: 10
235 cgcaaatggg cggtaggcgt g                                               21
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/575,193

DATE: 04/24/2006
TIME: 16:14:00

Input Set : A:\14875-160US1.txt
Output Set: N:\CRF4\04242006\J575193.raw

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238 <210> SEQ ID NO: 11
239 <211> LENGTH: 18
240 <212> TYPE: DNA
241 <213> ORGANISM: Artificial
243 <220> FEATURE:
244 <223> OTHER INFORMATION: an artificially synthesized primer sequence
246 <400> SEQUENCE: 11
247 tagaaggcac agtcgagg                                                  18
250 <210> SEQ ID NO: 12
251 <211> LENGTH: 24
252 <212> TYPE: DNA
253 <213> ORGANISM: Artificial
255 <220> FEATURE:
256 <223> OTHER INFORMATION: an artificially synthesized primer sequence
258 <400> SEQUENCE: 12
259 ctctgaatac tttcaacaag ttac                                           24
262 <210> SEQ ID NO: 13
263 <211> LENGTH: 116
264 <212> TYPE: PRT
265 <213> ORGANISM: Mus musculus
267 <400> SEQUENCE: 13
269 Met Glu Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Thr
270 1               5               10              15
273 Gln Ser Leu Ser Leu Thr Cys Ser Val Thr Gly Tyr Ser Ile Thr Ser
274             20              25              30
277 Gly Tyr Tyr Trp Thr Trp Ile Arg Gln Phe Pro Gly Asn Asn Leu Glu
278         35              40              45
281 Trp Ile Gly Tyr Ile Ser Phe Asp Gly Thr Asn Asp Tyr Asn Pro Ser
282     50              55              60
285 Leu Lys Asn Arg Ile Ser Ile Thr Arg Asp Thr Ser Glu Asn Gln Phe
286 65              70              75              80
289 Phe Leu Lys Leu Asn Ser Val Thr Thr Glu Asp Thr Ala Thr Tyr Tyr
290             85              90              95
293 Cys Ala Arg Gly Pro Pro Cys Thr Tyr Trp Gly Gln Gly Thr Leu Val
294             100             105             110
297 Thr Val Ser Ala
298         115
301 <210> SEQ ID NO: 14
302 <211> LENGTH: 6
303 <212> TYPE: PRT
304 <213> ORGANISM: Mus musculus
306 <400> SEQUENCE: 14
308 Ser Gly Tyr Tyr Trp Thr
309 1               5
312 <210> SEQ ID NO: 15
313 <211> LENGTH: 16
314 <212> TYPE: PRT
315 <213> ORGANISM: Mus musculus
317 <400> SEQUENCE: 15
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```
319 Tyr Ile Ser Phe Asp Gly Thr Asn Asp Tyr Asn Pro Ser Leu Lys Asn
320 1               5                   10                  15
323 <210> SEQ ID NO: 16
324 <211> LENGTH: 6
325 <212> TYPE: PRT
326 <213> ORGANISM: Mus musculus
328 <400> SEQUENCE: 16
330 Gly Pro Pro Cys Thr Tyr
331 1               5
334 <210> SEQ ID NO: 17
335 <211> LENGTH: 120
336 <212> TYPE: PRT
337 <213> ORGANISM: Mus musculus
339 <400> SEQUENCE: 17
341 Met Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Leu Val Arg Pro Gly
342 1               5                   10                  15
345 Ala Ser Val Lys Leu Ser Cys Thr Ala Ser Gly Phe Asn Ile Lys Asp
346             20                  25                  30
349 Asp Tyr Val His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp
350             35                  40                  45
353 Ile Gly Arg Ile Asp Pro Ala Asp Gly Lys Thr Lys Tyr Ala Pro Lys
354         50                  55                  60
357 Phe Gln Asp Lys Ala Thr Met Thr Ser Asp Thr Ser Ser Asn Thr Ala
358 65                  70                  75                  80
361 Tyr Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr
362                 85                  90                  95
365 Cys Val Arg Trp Arg Ile Tyr Tyr Gly Leu Met Asp Tyr Trp Gly Gln
366             100                 105                 110
369 Gly Thr Ser Val Thr Val Ser Ser
370             115                 120
373 <210> SEQ ID NO: 18
374 <211> LENGTH: 5
375 <212> TYPE: PRT
376 <213> ORGANISM: Mus musculus
378 <400> SEQUENCE: 18
380 Asp Asp Tyr Val His
381 1               5
384 <210> SEQ ID NO: 19
385 <211> LENGTH: 17
386 <212> TYPE: PRT
387 <213> ORGANISM: Mus musculus
389 <400> SEQUENCE: 19
391 Arg Ile Asp Pro Ala Asp Gly Lys Thr Lys Tyr Ala Pro Lys Phe Gln
392 1               5                   10                  15
395 Asp
399 <210> SEQ ID NO: 20
400 <211> LENGTH: 10
401 <212> TYPE: PRT
402 <213> ORGANISM: Mus musculus
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 04/24/2006
PATENT APPLICATION: US/10/575,193   TIME: 16:14:01

Input Set : **A:\14875-160US1.txt**
Output Set: **N:\CRF4\04242006\J575193.raw**

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,10,11,12

VERIFICATION SUMMARY   DATE: 04/24/2006
PATENT APPLICATION: **US/10/575,193**   TIME: 16:14:01

Input Set : **A:\14875-160US1.txt**
Output Set: **N:\CRF4\04242006\J575193.raw**

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L:12   M:270 C: Current Application Number differs, Replaced Current Application No
L:12   M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:4184 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:221,Line#:4182
L:4211 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:223,Line#:4209
L:4238 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:225,Line#:4236
L:4265 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:227,Line#:4263
L:4292 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:229,Line#:4290
L:4319 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:231,Line#:4317
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L:4373 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:235,Line#:4371
L:4400 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:237,Line#:4398
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L:4775 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:263,Line#:4773
L:4802 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:265,Line#:4800
L:4829 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:267,Line#:4827
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